

TRANSMISSION VERIFICATION REPORT

TIME : 08/13/2010 11:42  
NAME  
FAX  
TEL  
SER. # : F9N212739

DATE, TIME	08/13 11:41
FAX NO./NAME	15143391105
DURATION	00:00:18
PAGE(S)	01
RESULT	OK
MODE	STANDARD ECM

Si vous avez des questions SVP n'hésiter pas de nous conatcter

Merci beaucoup !

**Christina Antoniou**

Magna Inoxydable et Aluminium

ventes internes aérospatiale/inside sales aerospace

5775 rue Kieran

St Laurent QC, H4S 0A3

Tel: (514) 339-1211 Fax: (514)339-1105

[www.magnastainless.com](http://www.magnastainless.com)

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**From:** Chantal Lavoie [mailto:[clavoie@dartaero.com](mailto:clavoie@dartaero.com)]

**Sent:** August 10, 2010 1:29 PM

**To:** Christina Antoniou

**Subject:** QUOTE

Hi Christina,  
Please advise price & delivery on material.

17-4 bar 1.250" x 2" x 24 ft OFFRE 1 1/2 " X 2" X 12' LG \$ 986.12 EACH LENGTH 1 1/2 SEMAINE DE LIVRAISON

303 bar 1" x 1" x 12 ft 1 BAR \$ 259.00/PC 1 1/2 SEMAINE DE LIVRAISON

~~303 bar 1.5" x 3" x 12 ft 1 BAR \$ 1209.00/PC 1 1/2 SEMAINE DE LIVRAISON 1 1/2 SEMAINE DE LIVRAISON~~

6061t6 round bar 1" x 12ft 1 BAR \$ 85.00/PC 1 1/2 SEMAINE DE LIVRAISON

Thanks  
Chantal

## Chantal Lavoie

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**From:** Christina Antoniou [cantoniou@magnastainless.com]  
**Sent:** August 12, 2010 11:30 AM  
**To:** Chantal Lavoie  
**Subject:** RE: QUOTE

Hello Chantal,

303 Flat 1 x 3 x 150" lg approx  
1 bar \$ 966.00/pc  
1 1/2 weeks delivery

Thank you

## Christina Antoniou

Magna Inoxydable et Aluminium  
ventes internes aérospatiale/inside sales aerospace  
5775 rue Kieran  
St Laurent QC, H4S 0A3  
Tel: (514) 339-1211 Fax: (514)339-1105  
[www.magnastainless.com](http://www.magnastainless.com)

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**From:** Chantal Lavoie [mailto:[clavoie@dartaero.com](mailto:clavoie@dartaero.com)]  
**Sent:** August 11, 2010 1:09 PM  
**To:** Christina Antoniou  
**Subject:** RE: QUOTE

Hi Christina,  
Please advise price & delivery on material.  
303 bar 1" x 3" x 12ft  
Thanks  
Chantal

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**From:** Christina Antoniou [mailto:[cantoniou@magnastainless.com](mailto:cantoniou@magnastainless.com)]  
**Sent:** August 11, 2010 10:49 AM  
**To:** Chantal Lavoie  
**Subject:** RE: QUOTE

Bonjour Chantal,

Voici les prix ci dessous

Pour le item 1 le 1 1/2 x 2 est la seule dimension disponible a la moment, déjà vérifier avec 3 fournisseurs

D4148-3

~~17-4 Bar 1.250" x 2" x 24 ft~~

M174B2.000X01.500	2.412105263	12
M174PH-H900B3.937X4.750	15.00431263	8
M174PH-H900R1.000	72.96584177	4
M174PH-H900R1.375	75.65768421	4
M2024T3S.040	356.4229895	34
M2650-6	29.84286747	30
M303B1.000X1.000	2.895667318	6
M303B1.000X2.000	1.83159	6
M303B1.500X03.000 <sup>1143"</sup>	5.173647368	6
M303B2.000X1.750	4.475354211	12 ft
M303R0.500	11.65344901	0
M303R0.750	81.95921053	50
M304B0.500X2.500	417.8467105	0 74 12
M304EX0.75-16F	297.1794868	0 993.555733 192
M304R1.00	8.210526316	0 0 0
M304R0.750	10.51168421	0 29.09473684 24
M304S12GA	70.28030015	0 204.1 32
M304S26GA	6.301324331	0 144 32
M304TR0.500W.035	83.69519575	0 129.490217 80
M304TR0.750W.065	1.212994737	0 63.5 24
M304TR1.000W.049	3.202610316	0 30.841584 24
M304TS0.500W.049	130.6874427	0 498.4837258 120
M304TS0.750W.049	315.3345074	0 367.9466048 120
M304TS0.750W.065	132.0615288	0 326.764885 200
M4130NB0.500X03.000	41.78473684	0 24 40
M4130NT0.500W.049	5.722631579	0 67.333 10
M4130NT0.750W.049	37.19178947	0 139.1667 30
M6061T6B0.187X04.000	7.874052632	0 73.42 24
M6061T6B0.250X02.500	3.837894737	0 30.4134 10
M6061T6B0.250X06.000	11.46773684	0 42 12
M6061T6B0.375X00.750	3.873942105	0 18.1471 12
M6061T6B0.500X05.000	29.14684211	0 49.8636 12
M6061T6B0.500X06.000	21.61113684	0 43.2814 24
M6061T6B0.750X00.250	5.619157895	0 16.5 12
M6061T6B0.750X00.750	1.765030004	0 36.5883 24
M6061T6B00750X00.125	15.80833158	0 99.3017 80
M6061T6B1.000X02.000	11.75260526	0 50.422 40
M6061T6B1.000X04.000	33.89348421	0 77.1 12
M6061T6B1.000X06.000	2.325987994	0 12 6
M6061T6B1.000X12.000	13.89175789	0 16 12
M6061T6B1.000X15.000	29.85052632	0 46.3 24
M6061T6B1.500X02.000	1.078557895	0 15.2863 12
M6061T6B1.500X04.000	3.476266098	0 11.2643 10
M6061T6B2.000X04.500	2.495788947	0 19.62421 6
M6061T6B30000X01.500	1.159783811	0 23.1789 20
M6061T6R0.625	43.44222632	0 77.5 30
M6061T6R0.750	7.119031579	0 12.11684211 40
M6061T6R1.000	1.183663158	0 3.68 12 ft

# SPECIFICATION

D

PURCHASE MATERIAL: AISI 303 SS BAR  
(NOTE: AISI 304/316 NOT ACCEPTABLE)



SPECIFICATION: ASTM A582

PART NUMBER: M303B|T.TTT|X|WW.WWW|  
                  THICK          WIDTH

WHERE "T.TTT" = THICKNESS IN INCHES  
AND "WW.WWW" = WIDTH IN INCHES

EG. 0.5" x 3.0" BAR = M303B0.500X03.000

C

B

A



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID **PO12403**

Purchase Order Date 8/13/10  
PO Print Date 8/13/10

Page Number 1 of 1

Order From : VC-MAG002

MAGNA STAINLESS  
5775 RUE KIERAN  
ST LAURENT, QC H4S 0A3  
CA

Contact Name	Buyer	Chantal Lavoie
Vendor Phone	Requisition Nbr	
Vendor Fax	Tax Resale Nbr	10127-2607
Vendor Account Nbr	Terms	Net 30
	Currency	CAD
	FOB	

Ship To : DART AEROSPACE LTD 1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA

**FAXED**  
*8/13/10*

Line Nbr	Reference Revision ID	Description/ Mfg ID	Req Date/ Taxable	Req Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price
1	M303B1.000X1.000	303 BAR 1" X 1"	8/26/10 Yes	12.00 f	Yours ppd	\$21.5800	\$258.96

**Special Inst:** MATERIAL: AISI 303 SS BAR AS PER  
ASTM A582  
NOTE: AISI 304/316 NOT ACCEPTABLE

2	M303B1.000X03.000	303 BAR 1" X 3"	8/26/10 No	12.00 f	Yours ppd	\$80.5000	\$966.00
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**Special Inst:** AS ABOVE

*PO 10/10/10*

PO Total: \$1,224.96

**MATERIAL CERTIFICATION  
REQ'D UPON DELIVERY**

No substitution or deviation without  
consent.  
Certificate of Conformity or Material  
Certification required when applicable

Change Nbr: 1

Change Date: 8/13/10



Montanstahl  
CH - 6855 Stabio

PT111

DATA SHEET FOR ACD STAINLESS STEEL FLAT BARS IN  
GRADES 303, 304 / 304L AND 316 / 316L

Applicable standards	Rev.	Grade		
		AISI - 303 UNS - S30300	AISI - 304/304L UNS - S30400 UNS - S30400	AISI - 316/316L UNS - S31600 UNS - S31603
ASTM	A320/A320M	2004	X	
	A484/A484M	2005	X	X
	A582/A582M	2005	X	
	A276	2008a		X
	A370	2005	X	X
	A479/A479M	2006a		X
AMS	5640U (type 1)	2007	X	
	2241P	2005	X	
	5653F	2002		X
	5648K	2002		X
	S 7720 A	1997		X
	5639H (type 1)	2002		X
	5647H	2002		X
	2248E	1993		X
ASME	QQ S 763A	2003		X
	SA479	2007		X

Chemical values

Grade	C <sup>(1)</sup>	Si <sup>(1)</sup>	Mn	Ni	Cr	Mo	S <sup>(1)</sup>	P <sup>(1)</sup>	N <sup>(1)</sup>	Cu <sup>(1)</sup>	Co <sup>(1)</sup>	Zr <sup>(1)</sup>
303	0,15	1	2 <sup>(1)</sup>	8-10	17-19	0,6 <sup>(1)</sup>	0,35 <sup>(2)</sup>	0,15	0,1	0,75	0,1	0,60
304/304L	0,03	0,75	2 <sup>(1)</sup>	8-10,5	18-20	0,5 <sup>(1)</sup>	0,03	0,04	0,1	0,50	0,1	
316/316L	0,03	0,75	1-2	10-14	16-18	2-3	0,03	0,04	0,1	0,75	0,1	

<sup>(1)</sup> Maximum values

<sup>(2)</sup> For thicknesses  $\leq 0,25"$ : S<sub>min</sub> = 0,20

Mechanical values<sup>(1)(2)</sup>

Grade	Thickness	TS <sup>(3)</sup> [KSI]	YS <sup>(3)</sup> [KSI]	EL <sup>(3)</sup> [%]	RA <sup>(3)</sup> [%]	HB <sup>(3)</sup>
303	Up to 0,5"	75	30	30	40	140-241
	Over 0,5"	75	30	35	50	223
304/304L	Up to 0,5"	90	45	30	40	140-223
	Over 0,5"	75	30	40	50	140-223
316/316L	Up to 0,5"	90	45	30	40	140-223
	Over 0,5"	75	30	30	40	140-223

<sup>(1)</sup> Maximum values; hardness is measured in centerline of width after removal of specific surface layer (see ASTM A320)

<sup>(2)</sup> Minimum values

<sup>(3)</sup> Cold drawn flat bars are not intentionally strain hardened but drawn to specific dimensional tolerances.

<sup>(4)</sup> Cold drawn flat bars have a higher magnetic permeability than HRAP flat bars.

- Solution annealed at 1050°C and water quenched prior to cold drawing.
- Intergranular corrosion test according to ASTM A262 practices A, C & E (where applicable)
- Micro and macro structure: OK
- Grain size per ASTM E112: 5-7
- No welding or weld repairs
- Material free of contamination from mercury or metals liquid at ambient temperature
- Material DFARS compliant

*10/02/07*

**MONTANSTAHL**  
 special profiles in steel 

 Tel: +41 (91) 6416-800  
 Fax: +41 (91) 6416-804  
 email: info@montanstahl.com

004413

## mill test certificate

 product  
 Flat - ACD 1 x 3 Inch 11-13"

mill test certificate according to

## Customer specs

 size standards  
 PT 111

 grade  
 303

 grade standards  
 ASTM A582/A582M

bundles

823768-823771

 order n°  
 Consignment Stock #4  
 (29884, 29739)

 net weight  
 5057 lbs

 execution  
 ACD

 melting  
 EAF/AOD

heat	C	Si	Mn	P	S	Ni	Cr	Mo	Ti	Al	N	Cu	Pb	V	Co
E212478 ✓	0.059	0.61	1.70	0.032	0.269	8.68	17.71	0.35			0.022	0.63			0.10
tensile strength		yield strength		elongation		area reduction		hardness		impact test					
Rm	Rp 0.2%		Rp 1%		A5	Z				HB				KV	
88 ksl	59 ksl				46 %	64 %				167					

- We hereby confirm that the material certified in this document is conform to enclosed data sheet
- Material is produced in compliance with ROHS (2002/95/EC)
- Material free from Mercury and radioactive contamination

- Country of melt: Spain
- Country of manufacturing origin: Switzerland



10/07/07

Trace Mark



date

05.11.2008

The works' inspector



CS 13464

Inc 08-31-10

 S00817PR009-2 MAGNA STAINLESS PO: P011112 Part #:  
 1.00PC 131.00LB



RODACCIAI S.p.A. - Via Leopoldo 1 - 00146  
Rome - Italy - Tel. +39 06 52512  
E-mail: [www.rodacciai.com](http://www.rodacciai.com) - E-mail: [info@rodacciai.com](mailto:info@rodacciai.com)



Segue certificato di collaudo  
Inspection Certificate's continuance

N. 039976 Date 15/07/2010

NOTE - Notes

100% crack tested by eddy current method: OK  
Heat treatment = 1940°F quenched in water  
The raw material was melted in Spain.  
This product was manufactured in Italy.  
Material according to our specification Nr. 047

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We certify hereby, that the above mentioned products are consistent with the order prescriptions. This certificate was generated by data system acc. to EN 10204, it is not necessary to be signed for validity.

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23042 Cesano Maderno (CO) - Via Leopoldo 1 - Italy  
Tel. +39 0347 8111 - Fax +39 0347 82512  
Internet: [www.rodacciai.com](http://www.rodacciai.com) - E-mail: [igq@rodacciai.com](mailto:igq@rodacciai.com)



CERTIFICATO DI COLLAUDO Inspection Certif. N. 039976 Date 15/07/2010

Secondo According to . . . . . EN 10204:2004 3.1

DESTINATARIO - Cargo-Receiver CLIENTE - Customer

ORDINE - Order D.d.T. - Delivery note  
N. 450301 Date 8/01/2010 N. 09362/13 Date 27/07/2010

Weight Lb 5.229,00  
Tolerance + 0,000 - 0,102 mm Bars Length 3.660 - 3.960

QUALITA' - Grade  
STANDARD Type AISI 303 ✓ WNr UNS S 30300

Mark RODACCIAI . . . . . 303 PLUS

COLATA - Heat . . . . . 989186 ✓

PROFILO - Shape . . . . . SQUARE

DIMENSIONE - Size . . . . . 1"

ESECUZIONE - Form of delivery . . . . . COLD DRAWN

ANALISI CHIMICA DI COLATA - Cast analysis % by mass

C	Mn	Si	S	P	Cr	Ni	Mo	Cu	Co
0,046	1,720	0,430	0,260	0,034	18,500	8,500	0,460	0,470	0,170

N	0,0380
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CARATTERISTICHE MECCANICHE ALLO STATO DI FORNITURA  
Mechanical properties of delivered material

	Tested	Max
Tensile Strength	Rm PSI	91924,0
Yield Strength	Rp(0,2) PSI	54516,0
Elongation	A 4 (%)	48,0
Hardness	HBW	187,0
Reduction of area	Z (%)	58,0

NOTE - Notes

According to : AMS 5640U type 1 2007 ASTM A 320/A320M-10  
ASTM A 582/A582M-05 ASTM A751-08

ASTM A484/A 484M 10

Micro and Macro structure : Satisfactory

The material was produced by EF + A.O.D.

No Weld Repair - Free of Mercury contamination

Pag. 1 / Segue

PO11112 - 989186

anf  
10/09/07

Co13448



SOLD TO:  
DART AEROSPACE LTD  
1270 ABERDEEN STREET  
HAWKESBURY, ON K6A 1K7

SHIP TO:  
DART AEROSPACE LTD  
1270 ABERDEEN STREET  
HAWKESBURY, ON K6A 1K7

Contact: CHANTAL

Ship Terms: PREPAID

**SPECIAL INSTRUCTIONS**

\*\*\*\*\* INCOMING \*\*\*\*\*

Currency	Sales Person	Customer Phone	Customer Fax	Customer PO	
CANADIAN DOLLARS	DAVE MC VETY	(613) 632-5200	(613) 632-1053	12403	
Sales Order	Terms	Ship Via	Date Ordered	Date Required	
W033912	NET 30 DAYS	NIR:R-557065-1	08/16/10	08/24/10	09/01/10

Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Signature: \_\_\_\_\_

# Purchase Order Receipt Listing

Page 1 of 1

Wednesday, September 01, 2010 2:36:01 PM

All amounts are calculated in domestic currency.

All Vendors PO ID PO12403 Receipt Dates from 9/1/2010 to 9/1/2010 All Line Item Types

All Item ID/GL/WOs All Rec. Employees All Currencies

Grouped by Vendor ID

Purchase Order ID/ Curr Type	Line Nbr/ Insp Req	Project ID	Reference/ Description/ Cert Std	PO U/M / Stock U/M	Required Date Required Qty	Recv Date/ Recv Emp	Recv Qty (PO U/M)	Cost Per Unit/ Recv Value	Inspected Qty/ Rejected Qty (PO U/M)	MRB Qty/ MRB Reject Qty	Book Amt
VendorID\Vendor Name		VC-MAG002	Magna Stainless								
PO12403	1		M303B1.000X1.000 f		8/26/2010	9/1/2010	12.0000	\$21.58	0.0000	0	\$258.96
CAD	No		303 BAR 1" X 1" f			12.0000	DESJ02		\$258.96	0.0000	0
			115555								
	2		M303B1.000X03.000 f		8/26/2010	9/1/2010	12.0000	\$80.50	0.0000	0	\$966.00
	No		303 BAR 1" X 3' f			12.0000	DESJ02		\$966.00	0.0000	0
			115555								
											Total Received Quantity: 24.0000
											Total Qty to Inspect (PO U/M): 0.0000
											Total Reject Quantity: 0.0000
											Total Receipt Value: \$1,224.96
											Total Balance Due Quantity: 0.0000

# Receiving Report

Date: 10/9/01

Supplier: MAGNA

Batch No: M115555

Dart P/O: 12403

Packing Slip: Yes  No   
 Invoice: Yes  No   
 Receipt: Cash  Cr

Release Note Attached: Yes  No  N/A   
 Waybill Attached: Yes  No  N/A   
 Shipment Complete: Yes  No  N/A   
 QC6 Inspection OK 10/9/01 N/A   
 Work Order ✓ N/A

## Discrepancies

Part Number	Description	Quantity Ordered	Quantity Received	Quantity Returned	Quantity Short	Comments

Initials of receiver (if shipment OK) LL Level 12

Production/Admin:

Date 10/9/01

Received/Costing

Initial LL

Location